PRODUCT DATA SHEET

26.01.2024 Ed.3

Polyethylene

BB2541

High Density Polyethylene for Blow Moulding

Description

BB2541 is a multimodal High Density Polyethylene intended for blow moulding applications. BB2541 exhibits excellent process ability allowing potential for energy savings during goods production. BB2541 is characterised by an outstanding environmental stress cracking resistance together with excellent impact strength combined with good stiffness allowing therefore further container downweighing and waste reduction.

Typical characteristics

BB2541 can be described with following typical characteristics:

Easy process ability

Outstanding environmental stress crack resistance

Excellent impact strength

Good stiffness

Applications

BB2541 is intended for following applications:

Blow moulding

Bottles and containers up to 10 litres

Household and chemical containers such as detergents, cleaners, motor oils

Physical properties

Property	Typical value *	Unit	Test method
Density	954.0	kg/m³	ISO 1183-1
Melt flow rate (190 °C/5 kg)	1.15	g/10min	ISO 1133-1
Melt flow rate (190 °C/2.16 kg)	0.30	g/10min	ISO 1133-1
Melt flow rate (190 °C/21.6 kg)	32	g/10min	ISO 1133-1
Flexural modulus (1mm/min)	1200	MPa	ISO 178
Hardness, Shore D	64	-	ISO 868
Heat deflection temperature B (0.45 MPa)	75	°C	ISO 75-2
Tensile modulus	1100	MPa	ISO 527-2
Tensile stress at yield (50 mm/min)	25	MPa	ISO 527-2
Tensile strain at yield (50 mm/min)	9	%	ISO 527-2
Environmental stress crack resistance (Antarox 10 ý152, F50, Bottle test)	500	h	ASTM D 1693-A
Environmental stress crack resistance (Antarox 10 ýF50, Bell test)	1000	h	ASTM D 1693-A

* Data should not be used for specification work

Processing techniques

BB2541 is easy to extrude and can be used in all conventional blow-moulding machines. Following parameters should be used as guidelines:

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Processing setting	Typical value/range
Barrel temperature	170 - 190 °C
Die temperature	175 - 190 °C
Melt temperature	170 - 200 °C

Packaging and storage

BB2541 should be stored in dry conditions at temperatures below 50°C and protected from UV-light. Improper storage can initiate degradation, which can result in odour generation and colour changes and can have negative effects on the physical properties of this product.

Product compliance documents

Latest versions of product safety information sheets (PSIS), product safety data sheets (SDS) and other product liability documents are available in our website www.borealisgroup.com.

Sustainability aspects

Borealis is ever mindful of the impact of our products on the planet. We promote Design for Circularity (DfC) and Design for Recycling (DfR) to conserve natural resources and to reduce the environmental impact of products over their entire lifetime (including production, use phase and after phase). DfR helps ensure that material can be effectively recycled while maximizing the material performance efficiency. Further information on sustainability and Design for Recycling (DfR) can be found from our websites www.borealisgroup.com and www.borealiseverminds.com.

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